Air Quality Permitting
Statement of Basis

May 22, 2006

Tier II Operating Permit
No. T2-040020

US ECOLOGY IDAHO, GRAND VIEW

Facility ID No. 073-00004

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FINAL

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Acronyms, Units, and Chemical Nomenclature

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	Environmental Protection Agency
EUI	Emission Unit Identification
HAPs	Hazardous Air Pollutants
IDAPA	A numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
m	meter(s)
MACT	Maximum Available Control Technology
NESHAP	Nation Emission Standards for Hazardous Air Pollutants
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PSD	Prevention of Significant Deterioration
Rules	Rules for the Control of Air Pollution in Idaho
SIP	State Implementation Plan
SM	synthetic minor
SO_2	sulfur dioxide
T/yr	Tons per year
$\mu g/m^3$	micrograms per cubic meter
USEI	US Ecology Idaho
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.400 Procedures and Requirements for Tier II Operating Permits.

2. FACILITY DESCRIPTION

US Ecology Idaho is a solid and hazardous waste treatment, storage, and disposal facility. Waste is trucked to the facility and prepared for disposal in landfill cells onsite. Waste is treated in two different areas of the facility; the Containment and Stabilization Building, and in Outdoor Stabilization.

The Containment and Stabilization Building is divided into two separate rooms; one room is used for containment operations (sorting, and crushing and screening), and the other room is used for indoor stabilization operations. The rooms are separated by a curtain that allows forklift and backhoe traffic to pass.

Containment operations include sorting, waste transfer, and crushing and screening.

The indoor stabilization process produces stable products by mixing waste with reagents in either of two mixing tanks capable of holding up to 60 tons of untreated waste each. Common reagents are cement, lime, ferrous sulfate ($FeSO_4$), and clay.

Outdoor stabilization operations produce stable products by mixing with reagents in either of two mixing bins capable of holding up to 30 tons of untreated waste each.

Emissions from these processes are PM, VOCs, HAPs, and TAPs. VOC emissions are negligible because the waste streams are not volatile; however, there are minor amounts of VOCs. HAP and TAP emissions from the waste are mostly metals. TAPs emissions are also associated with process reagents used to stabilize the waste.

3. FACILITY / AREA CLASSIFICATION

USEI is defined as a minor facility because its potential to emit is less than all applicable major source thresholds.

The facility is located within AQCR 63 and UTM zone 11. The facility is located in Owyhee County which is designated as unclassifiable for all criteria pollutants (PM_{10}, CO, NO_x, SO_2, lead, and ozone).

The AIRS information provided in Appendix C defines the classification for each regulated air pollutant at USEI. This required information is entered into the EPA AIRS database.

4. APPLICATION SCOPE

The USEI facility at Grand View has submitted a Tier II operating permit application to limit emissions from its facility to protect ambient air quality standards.

4.1 Application Chronology

June 22, 2004	Permit application received.
July 15, 2004	Permit application deemed complete.

August 11, 2004	USEI requests a draft permit.
November 9, 2004	Maximum production rates are established for every process.
June 14, 2005	Draft permit was sent to USEII.
March 29, 2006	Public comment draft permit issued
April 13 through May 12, 2006	Public comment period

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this Tier II permit.

5.1 Equipment Listing

Table 5.1 shows the emission units and processes at the USEI facility.

Table 5.1 EMISSION UNITS AT US ECOLOGY IDAHO

Source Description	Emissions Control(s)
I. Containment and Stabilization Building	
A. Building fugitive emissions	A. Negative building pressure: maintained by Containment or Stabilization building ventilation baghouses.
B. Containment Operations 1. Building ventilation baghouse; EUI[1] 'General'. The General baghouse collects emissions from waste transfer, as well as sorting, crushing, and crushing screening which were not captured by their specific baghouse.	B1. Building ventilation baghouse: Day HP Dust Filter, Model No. 128. Efficiency: 99.5% for PM.
2. Sorting; EUI 'SORT'. The 'SORT' baghouse collects emissions from sorting operations.	B2. Sort floor baghouse: Day HP Dust Filter, Model No. 160 or equivalent. Efficiency: 99.5% for PM.
3. Crushing; EUI 'CRUSH'. The 'CRUSH' baghouse collects crushing and crushing screening emissions.	B3. Crush baghouse: Day HP Dust Filter, Model No. 128. Efficiency: 99.5% for PM.
C. Indoor Stabilization Operations: 1. Building ventilation system; EUI 'STAB'. The 'STAB' baghouse and HEPA filters collect emissions from all indoor stabilization operations. The baghouse and HEPA are connected in series.	C1. Building ventilation: Donaldson 320HPW8 baghouse + Donaldson Ultra-Lock HEPA. Combined PM efficiency of 99.97%.
2. Two Indoor Stabilization Additive Silos: the silo baghouses collect emissions during silo filling. Additives are typically Portland cement or lime (58.5% CaO). EUI 'A_SILO' EUI 'L_SILO'	C2. Additive silo baghouses: both Indoor stabilization additive silos use a Stephens Model No. SV380 baghouse rated at 99.5% efficient for PM.
II. Outdoor Stabilization facility	
A. Waste stabilization: EUI 'OSW' Waste stabilization includes waste addition to the processing bin, clay addition, $FeSO_4$ addition, cement addition, and lime addition.	A. A waste processing bin lid covers the processing bin during lime and cement addition; rated at 25% efficient for PM.
B. Three Additive silos: the silo baghouses collect emissions during silo filling. Additives are usually Portland cement or lime (58.5% CaO). EUI 'OSA' EUI 'O_SILO' Additive silo[2]	B. Additive silo baghouses Each silo is equipped with a Mikropul 'Pulsair' baghouse rated at 99.5% efficient for PM.

1. EUI: Emission Unit Identification, as supplied by USEII.
2. No EUI provided.

5.2 Emissions Inventory

A detailed Potential to Emit emission inventory is included as Appendix A. Note that combustion products NO_x, SO_x, and CO are not listed because the facility does not use combustion in any of the waste treatment processes.

5.3 Modeling

Table 5.2 is a summary of the air dispersion modeling analysis. The results of the analysis demonstrate, to DEQ's satisfaction, that the US Ecology facility will not cause or significantly contribute to a violation of any ambient air quality standards. A detailed modeling analysis is included as Appendix B.

Table 5.2 RESULTS OF FULL IMPACT ANALYSIS

Pollutant	Averaging Period	Facility Ambient Impact ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Ambient Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Percent of NAAQS
PM_{10}	24-HR	6.12[a]	73.0	79.12	150	53%
	Annual	1.10[b]	26.0	27.10	50	54%
Lead	Month	0.37[c]	0.03	0.40	1.5c	27%

5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this T2.

IDAPA 58.01.01.401 ..... Tier II Operating Permit

The USEI facility at Grand View has submitted a Tier II operating permit application to limit emissions from its facility to protect ambient air quality standards.

IDAPA 58.01.01.205 ..... Prevention of Significant Deterioration

This facility is not a designated facility and the emission of any single pollutant is less than 250 T/yr. Therefore, this facility is not subject to PSD requirements.

40 CFR 60 ..... New Source Performance Standards

No equipment or process at the facility is subject to NSPS requirements.

40 CFR 61 and 63 ..... National Emission Standards for Hazardous Air Pollutants and MACT

No NESHAP or MACT standards apply to this facility.

5.5 Fee Review

Table 5.3 shows the USEI Tier II processing fee according to IDAPA 58.01.01.407. PM_{10} emissions (0.71 tons per year) and TAP/HAP emissions (1.30 tons per year) place the facility at permitted emissions of one to less than 10 tons per year.

Table 5.3 TIER II PROCESSING FEE SUMMARY

Emissions Inventory	
Pollutant	**Permitted Emissions**
NO_x	0.0
SO_2	0.0
CO	0.0
PM_{10}	0.7
VOC	0.0
TAPS/HAPS	1.3
Total:	0.0
Fee Due	**$ 2,500.00**

6. PERMIT CONDITIONS

Permit Condition 2.1: Facility Wide Operations & Maintenance Manual Requirements

The Permit Condition requires O&M manuals for facility baghouses and the HEPA filter. Copies of the O&M manuals shall be posted at the location of the applicable control device, and readily accessible to shift workers. The O&M manuals shall contain all information necessary for maintaining maximum equipment efficiency.

Permit Condition 2.3: Facility Wide Fugitive Emissions

The Permit Condition requires quarterly facility-wide inspections of potential sources of fugitive emissions.

Permit Condition 2.9: Facility Wide Visible Emissions

The Permit Condition requires quarterly facility-wide inspections of potential sources of visible emissions.

Permit Condition 3.4: Containment Operations (Sorting and Crushing and Screening) Throughput Limits

The Permit Condition limits yearly sorting throughput to 876,000 tons of waste per year, and crushing throughput to 438,000 tons of waste per year. The throughput limits are based on full time operations at the maximum achievable equipment process rates of 100 tons of waste per year for sorting, and 50 tons of waste per year for crushing.

Permit Condition 3.6: Operation of Air Pollution Control Equipment

The Permit Condition requires baghouse operations during any building operations, including maintenance of building negative pressure to reduce building fugitives. Building negative pressure is accomplished with the building ventilation systems which exhaust through baghouses.

Permit Condition 3.7: Throughput Monitoring Requirement

The Permit Condition requires 12 month waste throughput monitoring and recordkeeping for the sorting as well as the crushing operations.

Permit Condition 3.8: Pressure Drop Monitoring Requirement

The Permit Conditions requires daily pressure drop monitoring and recording for the sort baghouse, the crush baghouse, and the building ventilation baghouse. Pressure drop shall be recorded in a log located near the baghouse.

Permit Condition 4.4: Indoor Stabilization (Waste Mixed with Reagents) Throughput Limits

The maximum indoor stabilization processing rate is 300 tons per hour. Air dispersion modeling of emissions at that process rate complied with all state and federal ambient air quality standards. Therefore, indoor stabilization is throughput limited to the maximum processing rate at full time operations, or 2,628,000 tons of waste per year.

Silos have the highest emission rate during filling. Air dispersion modeling of emissions at the maximum fill rate of 50 tons per hour complied with all state and federal air quality standards. Therefore, the indoor stabilization silos, used for Portland cement and/or lime, are throughput limited to the maximum fill rate at full time operations, or 438,000 tons of reagent per year. Note that only one silo can be filled at a time due to facility design; therefore, the total throughput limit for silos is calculated and limited at full time operations for one silo only.

Permit Condition 4.6: Operation of Air Pollution Control Equipment

The Permit Condition requires operation of the building ventilation baghouse and HEPA filter during any building operations, as well as negative building pressure, which is accomplished with the baghouse and HEPA filter.

Permit Condition 4.7: Throughput Monitoring Requirement

The Permit Condition requires waste and silo throughput to be recorded monthly and calculated as a rolling 12 month total. Silo throughput shall be summed as a total regardless of the reagents used because air dispersion modeling was conducted for the worse case scenario of 100% Portland cement emissions.

Permit Condition 4.8: Pressure Drop Monitoring Requirement

The Permit Conditions requires daily pressure drop monitoring and recording for the indoor stabilization baghouse and HEPA filter. Pressure drop shall be recorded in a log located near the devices.

Permit Condition 5.4: Outdoor Stabilization Facility Throughput Limits

The maximum outdoor stabilization processing rate is 270 tons per hour. Air dispersion modeling of emissions at that process rate complied with all state and federal ambient air quality standards. Therefore, outdoor stabilization is throughput limited to the maximum processing rate at full time operations, or 2,365,200 tons of waste per year.

Silos have the highest emission rate during filling. Air dispersion modeling of emissions at the maximum fill rate of 50 tons per hour complied with all state and federal air quality standards. Therefore, the outdoor stabilization silos, used for Portland cement and/or lime, are throughput limited to the maximum fill rate at full time operations, or 438,000 tons of reagent per year. Note that only one silo can be filled at a time due to facility design; therefore, the total throughput limit for silos is calculated and limited at full time operations for one silo only.

Permit Condition 5.6: Operation of Air Pollution Control Equipment

The Permit Condition requires operation of the silo baghouses during silo filling operations.

Permit Condition 5.7: Monitoring Requirement

The Permit Condition requires waste and silo throughput to be recorded monthly and calculated as a rolling 12 month total. Silo throughput shall be summed as a total regardless of the reagents used because air dispersion modeling was conducted for the worse case scenario of 100% Portland cement emissions.

7. PERMIT REVIEW

7.1 Regional Office Review of Draft Permit

A draft permit was made available for regional office review on June 9, 2005. Comments were received and have been incorporated into this permit.

7.2 Facility Review of Draft Permit

A draft permit was provided for the facility on June 9, 2005. Comments were received and have been incorporated into this permit.

7.3 Public Comment

A public comment period was provided from April 13 through May 12, 2006. No comments were submitted during the comment period.

8. RECOMMENDATION

Based on the review of the application materials, and all applicable state and federal regulations, staff recommends that DEQ issue final Tier II Operating Permit and Permit to Construct No. T2-040020 to US Ecology for its Grand View facility. The project does not involve PSD permitting requirements.

CM/bf Permit No. T2-040020

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Appendix A

Emission Data

T2-040020
US Ecology Idaho, Inc.
Grand View, ID

US ECOLOGY POTENTIAL TO EMIT

Emission point or description	Contributing processes	Emission rate (T/yr)			
		PM_{10}	Metals	Lead	TAP/HAP
I. CONTAINMENT AND STABILIZATION BUILDING	**I. BLDG TOTAL:**	0.8694	2.1299	0.1842	0.0005
A. Containment (debris handling)	**A. Containment subtotal:**	0.1422	0.6438	0.0557	0.0001
1. Stack emissions	**1. Stack emissions total:**	0.0471	0.2082	0.0180	0.0000
Sort floor stack	Sorting	0.0012	0.0057	0.0005	0.0000
Crushing stack	Crushing & crushings screening	0.0416	0.1830	0.0158	0.0000
Building ventilation stack	Sorting, crushing, screening, waste transfer	0.0043	0.0196	0.0017	0.0000
2. Fugitive emissions					
Fugitive emissions	All containment processes	0.0952	0.4356	0.0377	0.0001
B. Indoor stabilization	**B. Indoor stabilization subtotal:**	0.7271	1.4861	0.1285	0.0003
1. Stack emissions					
Baghouse/HEPA stack	Waste handling & loadout, additive loading	0.0022	0.0044	0.0004	0.0000
2. Fugitive emissions					
Building fugitives	All stabilization processes	0.7250	1.4816	0.1281	0.0003
II. OUTDOOR STABILIZATION PROCESS	**II. PROCESS TOTAL:**	1.9376	2.4199	0.2093	0.0005
Mix bins	Waste transfer, additive loading, weighing	1.9376	2.4199	0.2093	0.0005
III. SILO FILLING/LOADING	**III. SILO TOTAL:**	4.3942	0.0000	0.0000	8.6466
1. Stack emissions					
Indoor stabilization silo		0.3225	0.0000	0.0000	0.6346
Outdoor stabilization silo		0.3378	0.0000	0.0000	0.6646
2. Fugitive emissions					
All silos fugitives		3.7340	0.0000	0.0000	7.3475
IV. FACILITY TOTAL	**IV. FACILITY TOTAL:**	7.20	4.55	0.39	8.65
Total point/stack emissions		0.71	0.21	0.02	1.30
Total fugitive emissions		6.49	4.34	0.38	7.35

Notes:

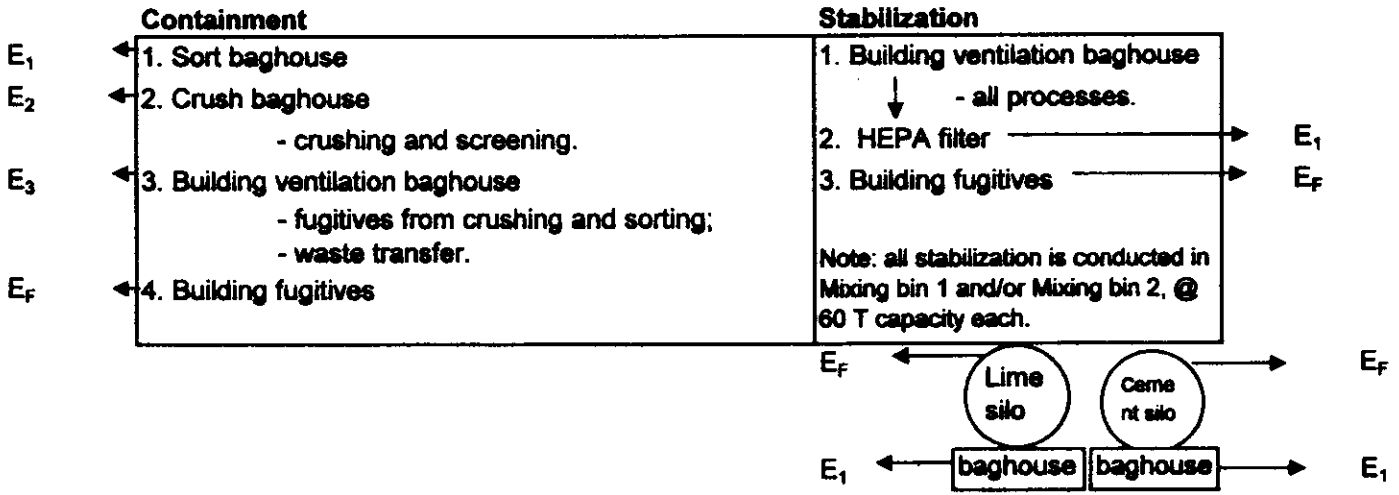
TAP/HAP totals for silo filling represent 100% of emitted PM as Portland cement. Lime, the other silo TAP, would total 58.5% of the Portland cement totals, or 5.06 T/yr silo total (the lime is 58.8% CaO).

1. Metals weight fraction, as determined for the analysis, do not sum to 100%. The worse case weight percents represent a variety of materials and the highest sampled metals weight fraction. For this reason, the total metals emitted are calculated at a higher emission rate than the PM total.

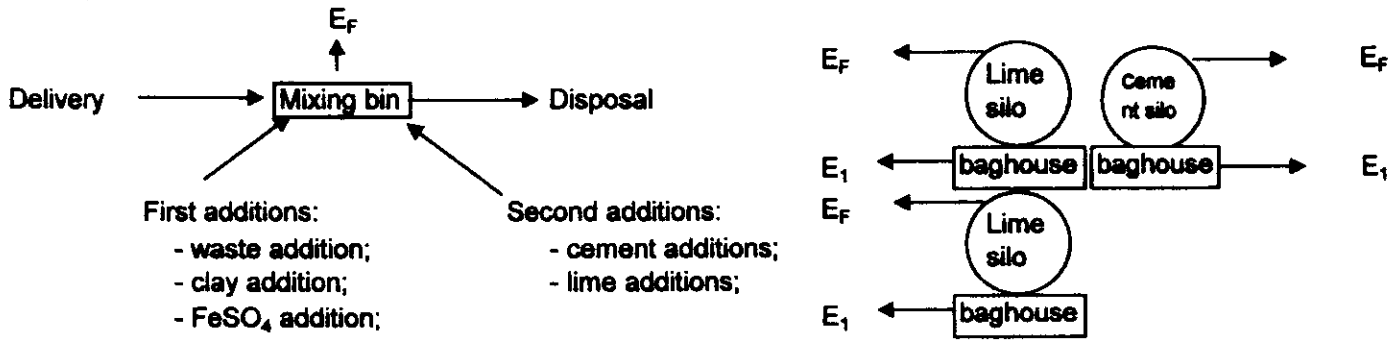
FACILITY EMISSION POINTS

E_i = point or stack emissions E_F = fugitive emissions

I. Containment and Stabilization building



II. Outdoor Stabilization Facility



Appendix B

Modeling Review

T2-040020
US Ecology Idaho, Inc.
Grand View, ID

MEMORANDUM

DATE: 12/20/04

TO: Charlie Mazzone, Air Quality Division

THROUGH: Kevin Schilling, Air Quality Division

FROM: Dustin Holloway, Air Quality Division

PROJECT NUMBER: T2-040020

SUBJECT: Modeling Review for the US Ecology facility near Grandview, Facility ID No-073-00004

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1. SUMMARY

Washington Group International (WGI) conducted a full impact analysis for PM_{10} and lead emissions from the US Ecology of Idaho, Inc. (US Ecology) facility located near Grandview in support of a Tier II operating permit. The results of the analysis demonstrate, to DEQ's satisfaction, that the facility will not cause or contribute to a violation of any ambient air quality standards.

2. BACKGROUND INFORMATION

2.1 *Applicable Air Quality Impact Limits*

US Ecology is located near Grandview in Owyhee county. Owyhee county is designated unclassifiable for all criteria air pollutants. The following table summarizes the applicable air quality standards for this area.

Table 2.1 APPLICABLE REGULATORY LIMITS

Pollutant	Averaging Period	Significant Contribution Levels ($\mu g/m^3$)[a, b]	Regulatory Limit ($\mu g/m^3$)[c]	Modeled Value Used[d]
PM_{10}[e]	Annual	1	50[f]	Maximum 1[st] highest[g]
	24-hour	5	150[h]	Maximum 6[th] highest[i] Highest 2[nd] highest[j]
Lead	Quarterly	NA	1.5[k]	

[a] IDAPA 58.01.01.006.93
[b] Micrograms per cubic meter
[c] IDAPA 58.01.01.577 for criteria pollutants, IDAPA 58.01.01.585 for non-carcinogenic toxic air pollutants IDAPA 58.01.01.586 for carcinogenic toxic air pollutants.
[d] The maximum 1[st] highest modeled value is always used for significant impact analysis and for all toxic air pollutants.
[e] Particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers
[f] Never expected to be exceeded in any calendar year.
[g] Concentration at any modeled receptor.
[h] Never expected to be exceeded more than once in any calendar year.
[i] Concentration at any modeled receptor when using five years of meteorological data.
[j] *The highest 2[nd] high is considered to be conservative for five years of meteorological data.*
[k] Not be exceeded in any quarter of any calendar year.

2.2 *Background Concentrations*

This modeling analysis uses the default background concentrations for small town/suburban areas in DEQ's background concentration data.[1] The following table summarizes the applicable background concentrations for this area.

Table 2.2 BACKGROUND CONCENTRATIONS.		
Pollutant	**Averaging Period**	**Background concentrations ($\mu g/m^3$)[a]**
PM_{10}	24-hour	73.0
	Annual	26.0
Lead	quarterly	0.03
a. Micrograms per cubic meter.		

3. ASSESSMENT OF SUBMITTED, CERTIFIED MODELING ANALYSIS

3.1 *Modeling Methodology*

Washington Group International (WGI) conducted a full impact analysis for PM_{10} and lead in addition to a toxic pollutant analysis. DEQ did not review the toxic pollutant analysis because the provisions of IDAPA 58.01.01.210 and IDAPA 58.01.01.585-586 do not apply to Tier II Operating Permits.

Table 3.1 MODELING PARAMETERS.		
Parameter	**What Facility Submitted**	**DEQ's Review/Determination**
Modeling protocol	No protocol was submitted	Although no protocol was submitted, the analysis adhered to established rules and guidelines.
Model Selection	ISCST3 version 02035	This model is the recommended model
Meteorological Data	Boise airport 1987-1991	This is the most representative data available for this area.
Model Options	Regulatory Defaults	Appropriate for this situation.
Land Use	Rural classification	Rural is the correct land use classification for this sparsely populated area.
Complex Terrain	Simple and complex terrain were analyzed.	There are some elevated receptors near the facility. These were accounted for.
Building Downwash	Downwash was included	ISCST3 accounts for downwash caused by nearby structures. However, ISCST3 does not calculate cavity concentrations. The sources and buildings at this facility are far enough away from the fenceline that the cavity regions do not affect ambient air.
Receptor Network	50 meter spacing along the fenceline; 50 meter spacing out to 200 meters; 100 meter spacing out to 500 meters; 200 meter spacing out to 1,000 meters; 500 meter spacing out to 5,000 meters	The receptor grid is sufficient for this analysis. If the ambient concentrations were close to the applicable standards, DEQ would recommend a finer grid spacing in the area of the maximum concentration. However, the estimated concentrations from this facility are far below any standards.
Facility Layout	N/A	The facility layout included the buildings identified on the plot plan which could affect pollution dispersion from the sources at the facility.

[1] Hardy, Rick and Schilling, Kevin. *Background Concentrations for Use in New Source Review Dispersion Modeling*. Memorandum to Mary Anderson, March 14, 2003.

3.2 Emission Rates

The following table summarizes the emissions rates included in the modeling analysis.

Table 3.2 EMISSION RATES			
Emission Release Point	**Source Description**	**PM_{10} Emission Rate (lb/hr)**	**Lead Emission Rate (lb/hr)**
Sort	Sort Floor Baghouse	2.72E-04	1.12E-04
Crush	Crusher Baghouse	9.50E-03	3.61E-03
General	General Building Ventilation Baghouse	9.78E-04	3.89E-04
Stab	Stabilization Baghouse	1.65E-04	2.91E-05
A_Silo	Additive Silo	7.36E-02	N/A
L_Silo	Lime Silo	7.36E-02	N/A
OSA	Stabilization Facility Additives	4.65E-01	N/A
O_Silo	Stabilization Facility Silos	1.45E-01	N/A
OSW	Outdoor Stabilization Facility Waste Addition	1.32E-01	4.78E-02

3.3 Emission Release Parameters

Table 3.3 EMISSION RELEASE PARAMETERS							
Emission Release Point	**Easting (m)**	**Northing (m)**	**Elevation (m)**	**Stack Height (ft)**	**Temperature (°F)**	**Exit Velocity (m/s)**	**Stack Diameter (ft)**
PM_{10} and Lead Point Sources							
Sort	560,048	4,768,038	785.3	80	68	17.288	3.67
Crush	560,051	4,768,038	785.3	80	68	22.683	2.67
General	560,050	4,768,038	785.3	80	68	16.091	3.17
Stab	560,035	4,768,030	785.8	100	68	20.213	4.0
PM_{10} Point Sources							
A_SILO	559,998	4,768,017	787	60	68	0.002	2.76
L_SILO	559,998	4,768,012	787.1	60	68	0.002	2.76
OSA	559,977	4,768,152	783.9	40	68	0.002	2.76
O_SILO	559,977	4,768,152	783.9	40	68	0.002	2.76
PM_{10} and Lead Volume Sources							
	Easting (m)	**Northing (m)**	**Elevation (m)**	**Release Height (m)**	**Horizontal Dimension (m)**	**Vertical Dimension (m)**	
OSW	559,977	4,768,135	784.1	3.05	1.52	4.57	

For horizontal or capped stacks, the exit velocity should be set to 0.001 meters per second. The applicant used 0.002 meters per second (m/s). However, since the estimated concentrations are well below the standards, DEQ determined that 0.002 m/s was sufficient for this analysis.

3.4 Results of Full Impact Analysis

Table 3.4 FULL IMPACT ANALYSIS RESULTS						
Pollutant	Averaging Period	Facility Ambient Impact ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Ambient concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Percent of NAAQS
PM_{10}	24-HR	6.12[a]	73.0	79.12	150	53%
	Annual	1.10[b]	26.0	27.10	50	54%
Lead	Month	0.37[c]	0.03	0.40	1.5[c]	27%

[a] 6th highest modeled concentration out of five years of meteorological data.
[b] Highest modeled annual concentration out of five years of meteorological data.
[c] The NAAQS standard for lead is based on a quarterly average. The ISCPrime output is a monthly average. This is more conservative than the quarterly standard.

The results of the analysis demonstrate, to DEQ's satisfaction, that the US Ecology facility will not cause or significantly contribute to a violation of any ambient air quality standards.

Appendix C

AIRS Information

T2-040020
US Ecology Idaho, Inc.
Grand View, ID

AIRS/AFS[a] FACILITY-WIDE CLASSIFICATION[b] DATA ENTRY FORM

Facility Name: US Ecology Idaho, Inc.
Facility Location: Grand View
AIRS Number: 073-00004

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment
SO_2	B							U
NO_x	B							U
CO	B							U
PM_{10}	B							U
PT (Particulate)	B							U
VOC	B							U
THAP (Total HAPs)	B							U
			APPLICABLE SUBPART					

[a] Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

[b] AIRS/AFS Classification Codes:

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, or each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.

SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).

Appendix D

Throughput Limitation Summary

T2-040020
US Ecology Idaho, Inc.
Grand View, ID

PROCESS THROUGHPUT LIMITS SUMMARY

Process	Contributing Processes	Maximum Equipment Capacity	Throughput Limit
I. CONTAINMENT AND STABILIZATION BUILDING			
A. Containment (debris handling)			
	Sorting	100 T/hr	876,000 T/yr
	Crushing & crushings screening	50 T/hr	438,000 T/yr
B. Indoor stabilization			
	Waste stabilization	300 T/hr	2,628,000 T/yr
II. OUTDOOR STABILIZATION PROCESS			
	Waste stabilization	270 T/hr	2,365,200 T/yr
III. SILO FILLING/LOADING	**ALL SILOS TOTAL:**	**100 T/hr**	**876,000 T/yr**
	Indoor stabilization silos total	50 T/hr	438,000 T/yr
	Outdoor stabilization silos total	50 T/hr	438,000 T/yr

Appendix E

Allowable Contaminant Concentrations

T2-040020
US Ecology Idaho, Inc.
Grand View, ID

Compound	CAS #	Concentration mg/kg
2-Chloro-1,3-butadiene	126-99-8	500
1,2-Dibromo-3-chloropropane	96-12-8	500
1,2-Dichlorobenzene	95-50-1	500
1,4-Dichlorobenzene	106-46-7	500
1,1-Dichloroethylene	75-35-4	500
1,2-Dichloroethane	107-06-2	500
1,1-Dichloroethane	75-34-3	500
2,4-D (Dichlorophenoxyacetic Acid)	94-75-7	500
1,4-Dinitrobenzene	528-29-0	500
	99-65-0	-
	100-25-4	-
1,4-Dioxane	123-91-1	500
1,2-Diphenylhydrazine	122-66-7	500
4,4-Methylene bis(2-chloroaniline)	101-14-4	500
2,3,7,8-Tetrachlorodibenzo-p-dioxin *	1746-01-6	0.02
1,2,4-Trichlorobenzene	120-82-1	500
1,1,1-Trichloroethane	71-55-6	500
1,1,2-Trichloroethane	79-00-5	500
2,4,5-Trichlorophenol	95-95-4	500
2,4,6-Trichlorophenol	88-06-2	500
1,2,3-Trichloropropane	96-18-4	500
1,2,4-Trimethylbenzene	95-63-6	500
	25551-13-7	-
Acetone	67-64-1	500
Acetonitrile	75-05-8	500
Acrolein	107-02-8	500
Acrylamide	79-06-1	500
Aniline	62-53-3	500
Aramite	140-57-8	500
Aroclor (all PCBs)	1336-36-3	500
Benomyl	17804-35-2	500
Benzene	71-43-2	500
Bis (2-chloroethyl) ether	111-44-4	500
Bromoform	75-25-2	500
Captan	133-06-2	500
Carbaryl	63-25-2	500
Carbofuran	1563-66-2	500
Carbon Disulfide	75-15-0	500
Carbon Tetrachloride	56-23-5	500
Chlordane	57-74-9	500
Chlorobenzene	108-90-7	500
Chlorobenzilate	510-15-6	500
Chloroform	67-66-3	500
Chloromethane	74-87-3	500
Creosol	1319-77-3	500
Creosote	8001-58-9	500
Cyclohexanone	108-94-1	500
DDT	50-29-3	500
DEHP (Di(2-Ethylhexyl) Phthalate)	117-81-7	500
Diazinon	333-41-5	500
Dibutyl Phthalate	84-74-2	500
Dichloromethane	75-09-2	500
Dieldrin	60-57-1	500
Diethanolamine	111-42-2	500
Diethyl phthalate	84-66-2	500

Compound	CAS #	Concentration mg/kg
Dimethyl aminoazo-benzene	60-11-7	500
Dinitro-o-cresol	534-52-1	500
Dioxin and furans *	NA	500
Diphenylamine	122-39-4	500
Endosulfan	115-29-7	500
Endrin	72-20-8	500
Epichlorohydrin	106-89-8	500
Ethyl acetate	141-78-6	500
Ethyl ether	60-29-7	500
Ethylbenzene	100-41-4	500
Ethylene Glycol	107-21-1	500
Formaldehyde	50-00-0	500
Heptachlor	76-44-8	500
Heptachlor epoxide	1024-57-3	500
Hexachlorobenzene	118-74-1	500
Hexachlorobutadiene	87-68-3	500
Hexachlorocyclopentadiene	77-47-4	500
Hexachloroethane	67-72-1	500
Isobutyl alcohol	78-83-1	500
Isopropyl Alcohol	67-63-0	500
Lindane	58-89-9	500
Malathion	121-75-5	500
Methanol	67-56-1	500
Methoxychlor	72-43-5	500
Methyl Ethyl Ketone	78-93-3	500
Methyl Isobutyl Ketone	108-10-1	500
Methyl methacrylate	80-62-6	500
Methyl parathion	298-00-0	500
Methylacrylonitrile	126-98-7	500
Naphthalene	91-20-3	500
n-Butyl Alcohol	71-36-3	500
n-Dioctyl phthalate	117-84-0	500
p-Nitroaniline	100-01-6	500
Nitrobenzene	98-95-3	500
n-Nitrosodi-n-butylamine	924-16-3	500
n-Nitrosodiethylamine	55-18-5	500
n-Nitrosodimethylamine	62-75-9	500
Parathion	56-38-2	500
Pentachloronitrobenzene	82-68-8	500
Pentachlorophenol	87-76-5	500
Phenol	108-95-2	500
Phorate	298-02-2	500
Phthalic anhydride	85-44-9	500
Picloram	1918-02-1	500
Polycylic Organic Matter **	NA	500
Promanide	23950-58-5	500
Sec-Butyl Alcohol	78-92-2	500
Styrene	100-42-5	500
Tetrachloroethylene	27-18-4	500
Thiram	137-26-8	500
Toluene	108-88-3	500
Toluene Diisocyanate	26471-62-5	500
Toxaphene	8001-35-2	500
Trichloroethylene	79-01-6	500
Triethylamine	121-44-8	500
Trifluralin	1582-09-8	500
Trimethyl benzene	25551-13-7	500
Vinyl Acetate	108-05-4	500
Vinyl Chloride	75-01-4	500
Xylene (o,m,p isomers)	1330-20-7	500
Total Volatile Organic Compounds	NA	500

TAP	CAS #	Substance Concentration Weight Fraction
Aluminum	7429-90-5	0.27
Antimony	7440-36-0	0.13
Arsenic	7440-38-2	0.0097
Asbestos	1332-21-4	1.00E-08
Barium	7440-39-3	0.13
Beryllium	7440-41-7	8.00E-05
Cadmium	7440-43-9	0.023
Chromium	7440-47-3	0.13
Copper	7440-50-8	0.27
Cyanides	592-01-8	0.27
Lead	7440-47-3	0.195
Manganese	7439-96-5	0.27
Mercury	7439-97-6	0.004
Nickel	7439-92-1	0.175
Selenium	7782-49-2	0.05
Silver	7440-22-4	0.004
Thallium	7440-28-0	0.028
Vanadium	1314-62-1	0.012
Zinc	7440-66-6	0.284